IN THE UNITED STA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

: Mikio IHAMA

SERIAL NUMBER

: 09/778,874

FOR

: SILVER HALIDE PHOTOGRAPHIC

EMULSION AND SILVER HALIDE PHOTOGRAPHIC LIGHTSENSITIVE

MATERIAL USING THE SAME

FILED

: February 8, 2001

GROUP ART UNIT

: 1752

EXAMINER

: Walke, Amanda C.

DECLARATION UNDER 37 C.F.R. 1.132

Assistant Commissioner for patents Washington, D.C. 20231

Sir:

I, Mikio IHAMA, hereby declare and state that:

I graduated from Osaka University, Faculty of Engineering Research, and received a Master's degree in Process Engineering in 1982.

I have been employed by Fuji Photo Film Co., Ltd. since April of 1982 at its Ashigara Research Laboratories, and since that time have been engaged in research and development on photographic emulsions.

Comparison between the present invention and the cited references

The perfect epitaxial emulsion of the present invention can be obtained by strictly controlling the ratio of the hexagonal tabular grains in the host tabular grains before the epitaxial deposition, the variation coefficient of equivalent-circle diameter, the ratio of the grains having dislocation lines, the ratio of (111) faces in side faces, and the epitaxial deposition method as summarized in TABLE 1 of EXAMPLE 1 (provided in page 94 of the specification of the present invention).

RECEIVED TC 17003 DECLARATION -2-

FIGS. 1 and 2 shown below are graphs in which the data presented in TABLE 3 of EXAMPLE 1 of the present invention (provided in page 101 of the specification) are plotted so as to clearly illustrate the scope of the present invention. FIG. 3 shown below is a graph in which the data presented in TABLE 4 of EXAMPLE 2 of the present invention (provided in page 103 of the specification) are plotted so as to clearly illustrate the scope of the present invention.

More specifically, in FIG. 1, the fresh properties presented in TABLE 3 are plotted with respect to the fog and sensitivity. Symbol ○ represents the fog, and symbol ● represents the sensitivity. From the left, the values of Samples 1, 2, 3, ... are plotted in the order.

In FIG. 2, the properties after storage presented in TABLE 3 are plotted with respect to the fog and sensitivity. Symbols \bigcirc and \blacksquare represent the same as those in the case of FIG. 1.

In FIG. 3, the change by the addition of KBr presented in TABLE 4 of EXAMPLE 2 is plotted with respect to the fog change and sensitivity change. Symbols ○ and ● represent the same as those in the case of FIG. 1.

Brust et al. describes that at maximum 69% of all the grains has 6 epitaxial portions. This reference discusses the grains themselves, and it makes no mention of photographic properties including spectral sensitization and chemical sensitization. Therefore, there is no description in this reference, from which the fresh properties, storage properties and stability can be expected.

Brust et al. does not provide descriptions regarding the photographic properties as described above, and therefore it is difficult to directly compare the emulsion of this reference with that of the present invention in a test. However, the dummy data of this reference is indicated on FIGS. 1 to 3 on the assumption that 69% of all the grains makes perfect epitaxial emulsion.

It can be clearly seen from FIGS. 1 and 2 that the emulsions of the present invention and Brust et al. exhibit a significant difference in terms of the sensitivity and fog when fresh, as well as the sensitivity and fog after storage.

It can be clearly understood from FIG. 3 that the emulsion of the present invention is remarkably improved from that of Brust et al. in terms of the stability, which is an important object of the present invention.

Brust et al. falls out of the scope of the present invention and this reference makes no mention of the photographic properties as described above. Further, Nishikawa et al. does not disclose an epitaxial emulsion of the present invention.

Thus, as presented in FIGS. 1 and 2, the present invention is highly superior to the prior art technique, and as shown in FIG. 3, the present invention has achieved a high stability, which is an important object in this technical field.

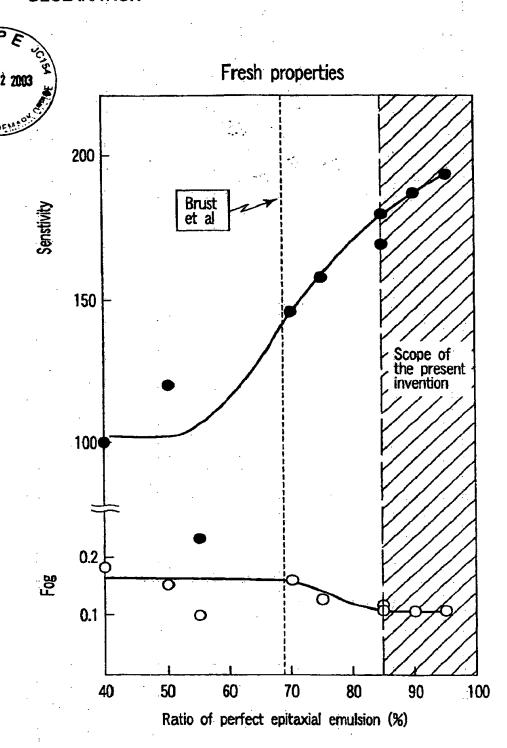


FIG.1

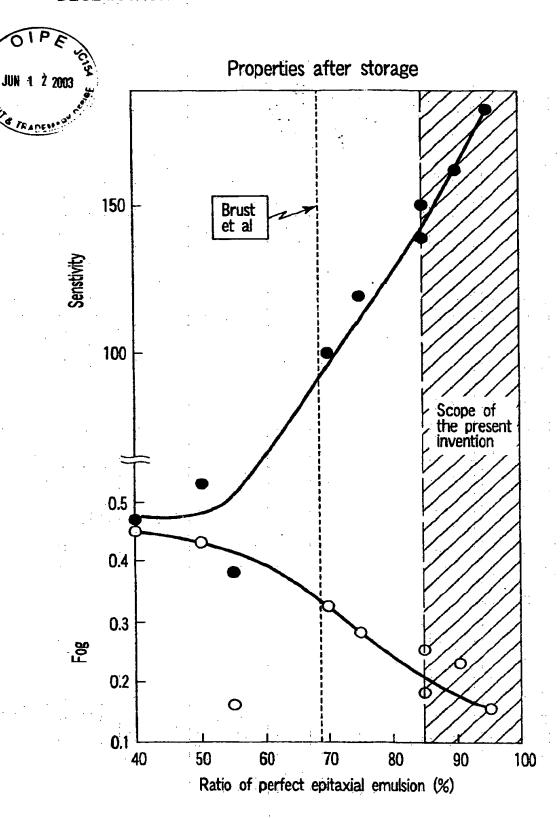


FIG.2

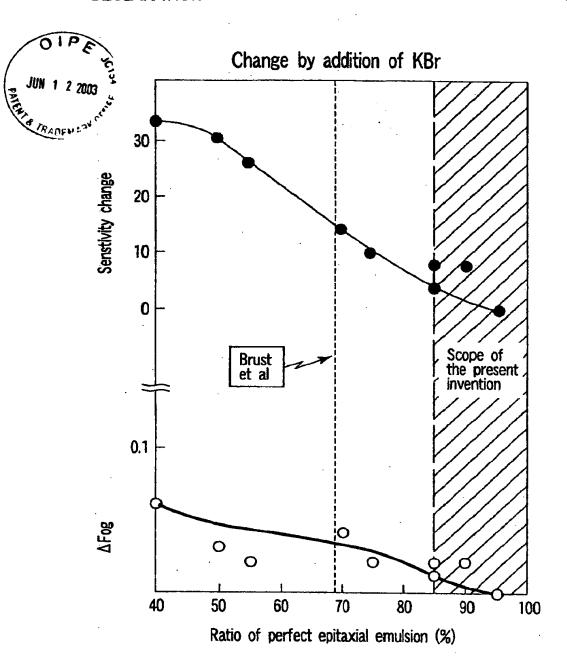


FIG.3

I, the undersigned, declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

mikio Shama

Mikio IHAMA

June 6,2003

Date